



My Site Concerning Scenarios Study & Strategy

WHITE PAPER

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BUSINESS OBJECTIVE

Business Rationale behind the White Paper

Many companies would like to fully understand the process around My Sites when an employee leaves the firm. They would also like to explore options for retrieving and archiving My Site content that is still valuable to that company, and deleting dead My Sites and Accounts to help free up system resources. Additionally, further documentation is often desired to help SharePoint administrators to with the maintenance of their SharePoint environments and My Sites.

This white paper serves to flush out several of the most common concerning My Site scenarios, as well as provide step by step instructions and guidance on how to react to those scenarios.



CONCERNING MY SITE SCENARIOS

List of Scenarios

The following is a list of concerning scenarios regarding My Sites. These scenarios represent typical concerns for companies when an employee leaves the organization.

1. The employee has created a My Site and their AD account has been disabled.
2. The employee has created a My Site and their AD account has been deleted.
3. The employee has specified an individual as their manager in the organizational hierarchy on their profile, how does this affect their My Site when their AD account is deleted or disabled?
4. The employee has valuable intellectual property stored on their My Site; however the My Site has been inoperable ever since they left firm.
5. The employee has sub-sites under their My Site and other employees use those sub-sites for team collaboration, what will happen to these sites after the employee has left the firm? How can we move these sites to another location?
6. After many employees have left, do these “dead” My Sites still take up disk space, and if they do, how can we clean them up?

Appropriate reactions to each of these scenarios are detailed later in this document.

Study Setup and Results Summary

SharePoint test users were used to perform the study of the previously mentioned scenarios. Each test user had a My Site before the test occurred, and their MOSS profile was configured as follows:

Account	My Site URL	Manager	Action Performed
Spuser1	/personal/spuser1	None specified	No Action Taken
Result of Action: N/A			
Spuser2	/personal/spuser2	None specified	Disabled AD account
Result of Action: Nothing except that user can't authenticate.			
Spuser3	/personal/spuser3	None specified	Deleted AD account
Result of Action: Profile crawler detected deletion and also deleted the associated profile, thus rendering My Site inaccessible.			
Spuser4	/personal/spuser4	Spuser5	Disabled AD account
Result of Action: Nothing except that user can't authenticate.			
Spuser5	/personal/spuser5	Spuser6	Deleted AD account
Result of Action: Profile crawler detected deletion and also deleted the associated profile, thus rendering My Site inaccessible. Also, MOSS sent a notification to their manager saying that the site is scheduled for deletion even though it isn't if Automatic Site Deletion is disabled.			



Spuser6	/personal/spuser6	None specified	No action taken
Result of Action: N/A			

SCENARIO 1: AD ACCOUNT DISABLED

“The employee has created a My Site and their AD account has been disabled.”

When an AD account is disabled, no effect should have been had on the profile or the My Site of that user, save the fact that the user themselves won't have access. The user's profile will not be deleted until the AD account itself is deleted, and therefore that My Site will remain unaffected.

If the organizational hierarchy (manager) was populated for that profile, the manager specified will receive a notification email stating that the site is scheduled for deletion. See [scenario three](#) for more information.

SCENARIO 2: AD ACCOUNT DELETED

“The employee has created a My Site and their AD account has been deleted.”

When an AD account is deleted, the MOSS profile crawl will pick up that deletion and will also delete the associated MOSS profile. After this happens the home page of that user’s My Site will become inaccessible and you’ll get the “user not found” ASP.NET error:

Server Error in '/' Application.

User not found.

Description: An unhandled exception occurred during the execution of the current web

However, you can still access the underlying content and sub sites within that user’s My Site through the URL. The reason you get the “user not found” error is because the My Site is trying to read that user’s meta-data out of the profile which doesn’t exist anymore. To access documents or other intellectual property within a disabled My Site, view [scenario four](#).

If you want to fully restore the My Site to its original state, see [section A](#) in the appendix on restoring a My Site.

By default the old My Site will remain indefinitely. This can be bad for several reasons, see [scenario six](#) on dead My Site cleanup for more information.



SCENARIO 3: ORGANIZATIONAL HIERARCHY

“The employee has specified an individual as their manager in the organizational hierarchy on their profile, how does this affect their My Site when their AD account is deleted or disabled.”

Having an organizational hierarchy setup in MOSS profiles can create interesting results when it comes to employees leaving the company. Specifically, managers of such employee’s receive an email similar to this:

*Sent: Saturday, April 19, 2008 2:49 AM
To: Doe, John
Subject: The My Site of Doe, Jane is scheduled for deletion*

The My Site of Doe, Jane is scheduled for deletion. As their manager you are now the temporary owner of their site. This temporary ownership gives you access to the site to copy any business-related information you might need. To access the site use this URL: <http://intranet/personal/jdoe>

Fortunately, this email serves as a precautionary notification, because the My Site will only be deleted if Automatic Site Deletion is enabled in central administration. The reason being, the employee will no longer be able to respond to the emails asking if the My Site is still in use, and if they don’t respond it will be deleted. However, if this setting is not enabled the email will in turn be lying, because the site won’t actually be deleted.

The manager will receive access, however, into that My Site. This access will only last while the AD account for that employing is still present (disabled is ok). If the account is deleted, the My Site will become inoperable. See [scenario four](#) to view instructions on how to retrieve intellectual property off the disabled My Site.

SCENARIO 4: RETRIEVING INTELLECTUAL PROPERTY

“The employee has valuable intellectual property stored on their My Site; however the My Site has been inoperable ever since they left firm.”

When an AD account is deleted, the MOSS profile crawl will pick up that deletion and will also deleted the associated MOSS profile. After this happens the home page of that user’s My Site will become in accessible. However, you can still access the underlying content and sub sites within that user’s My Site through the URL. The reason you get the “user not found” error is because the My Site is trying to read that user’s meta-data out of the profile which doesn’t exist anymore.

Server Error in '/' Application.

User not found.

Description: An unhandled exception occurred during the execution of the current web

Figure 1: My Site error when the AD account has been deleted.

This, however, isn’t a concern with intellectual property (IP), because IP is stored in the lists and libraries and not on their home page. To access their lists and libraries, you type “_layouts/viewlists.aspx” at the end of their My Site URL. You can now view and download any IP that you think should be retained.

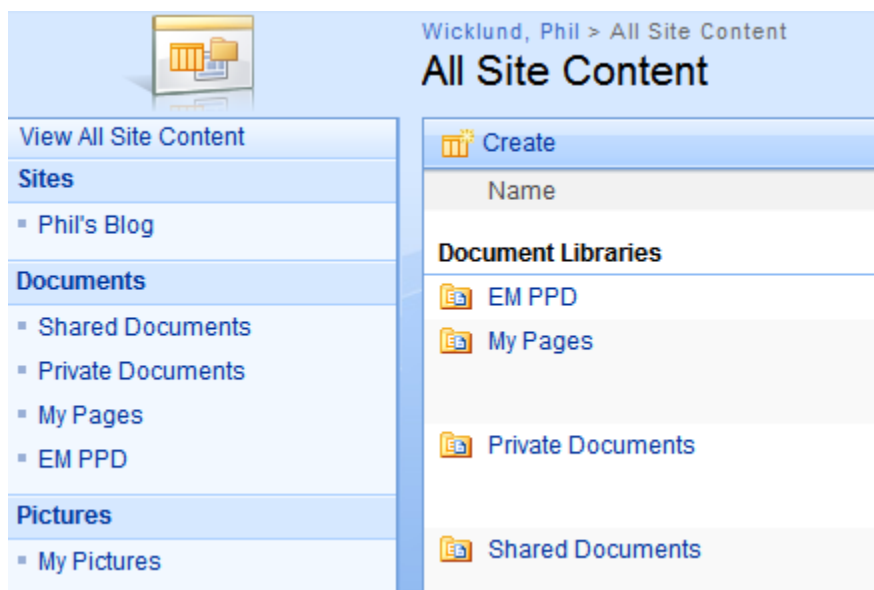


Figure 2: http://intranet/personal/pwicklund/_layouts/viewlists.aspx

SCENARIO 5: MIGRATING MY SITE SUB-SITES

“The employee has sub-sites under their My Site and other employees use those sub-sites for team collaboration, what will happen to these sites after the employee has left the firm? How can we move these sites to another location?”

Occasionally when an employee leaves the company, they leave behind sub sites underneath their My Site that stores valuable intellectual property and/or other employees in the company still use those sites for collaboration. Because the employee is no longer with the company, it is most often necessary to move those sub sites to another, more appropriate location. To do the migration, you'll use the STSADM export/import commands. That command will take a backup of a site and all its sub sites. Thereafter you can restore that backup into another location.

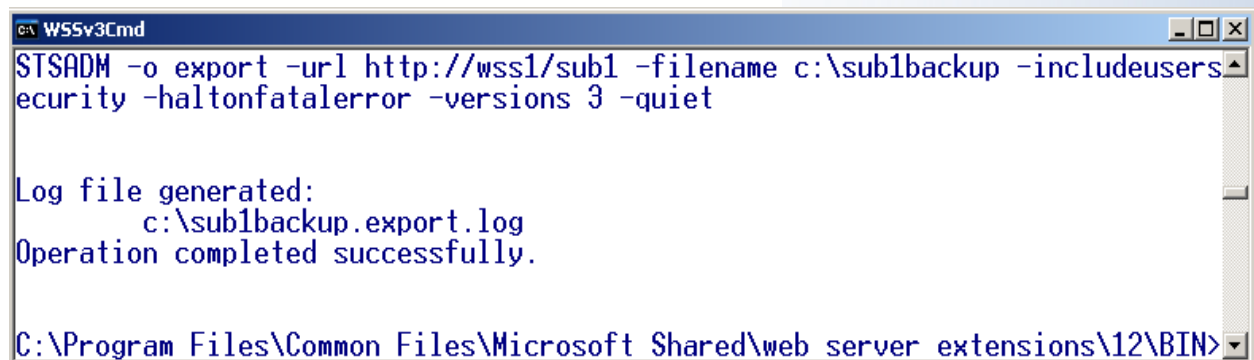
Migration Implementation Steps

1. *Backup the site with STSADM export*

On one of the web front ends of the farm, with command prompt navigation to STSADM.exe under `c:\program files\common files\microsoft shared\web server extensions\12\bin`

Enter the following command:

```
STSADM -o export -url [URL] -filename [path and filename] -includeusersecurity -haltonfatalerror -versions 3 -quiet
```



```
C:\ WSSv3Cmd
STSADM -o export -url http://wss1/sub1 -filename c:\sub1backup -includeusersecurity -haltonfatalerror -versions 3 -quiet

Log file generated:
    c:\sub1backup.export.log
Operation completed successfully.

C:\Program Files\Common Files\Microsoft Shared\web server extensions\12\BIN>
```

Figure 3: export demonstration, showing how to export a hierarchy of sites.

Available Parameters:

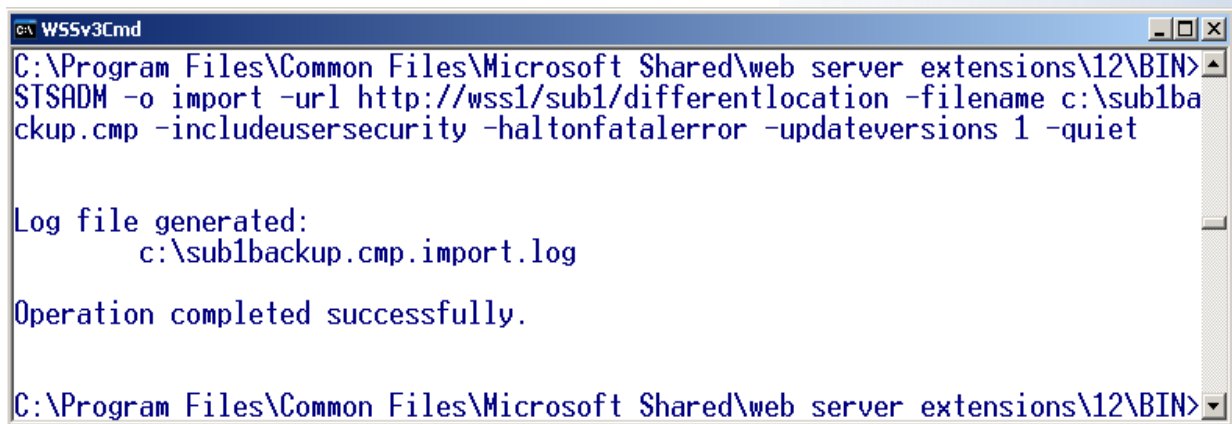
```
stsadm.exe -o export
-url <URL to be exported>
-filename <export file name>
[-overwrite]
[-includeusersecurity]
[-haltonwarning]
[-haltonfatalerror]
[-nologfile]
[-versions <1-4>
  1 - Last major version for files and list items (default)
  2 - The current version, either the last major or the last minor
  3 - Last major and last minor version for files and list items
  4 - All versions for files and list items]
[-cabsize <integer from 1-1024 megabytes>]
[-quiet] <terse/verbose command prompt output>
```

2. Restore the backup to another location with STSADM import

Again on the web front end of the farm (you could migrate to a different farm if you want), navigate to STSADM.exe with command prompt.

Enter the following command:

```
STSADM -o import -url [URL to import site to] -filename [Path and filename of backup] -includeusersecurity -haltonfatalerror -updateversions1 -quiet
```



```

C:\Program Files\Common Files\Microsoft Shared\web server extensions\12\BIN>
STSADM -o import -url http://wss1/sub1/differentlocation -filename c:\sub1ba
ckup.cmp -includeusersecurity -haltonfatalerror -updateversions 1 -quiet

Log file generated:
      c:\sub1backup.cmp.import.log

Operation completed successfully.

C:\Program Files\Common Files\Microsoft Shared\web server extensions\12\BIN>
```

Figure 4: import demonstration, importing a backup of a hierarchy of sites into a new location.

Available Parameters:

```

stsadm.exe -o import
-url <URL to import to>
-filename <import file name>
[-includeusersecurity]
[-haltonwarning]
[-haltonfatalerror]
[-nologfile]
[-updateversions <1-4>
  1 - Add new versions to the current file (default)
  2 - Overwrite the file and all its versions (delete then insert)
  3 - Ignore the file
  4 - Terminate with conflicts]
[-quiet] <terse/verbose command prompt output>

```

3. *Confirm the migration was successful*

Navigate to the site you just restored and confirm everything carried over successfully. Notice how the URL is reflected and all the sub sites of the migrated site moved as well:

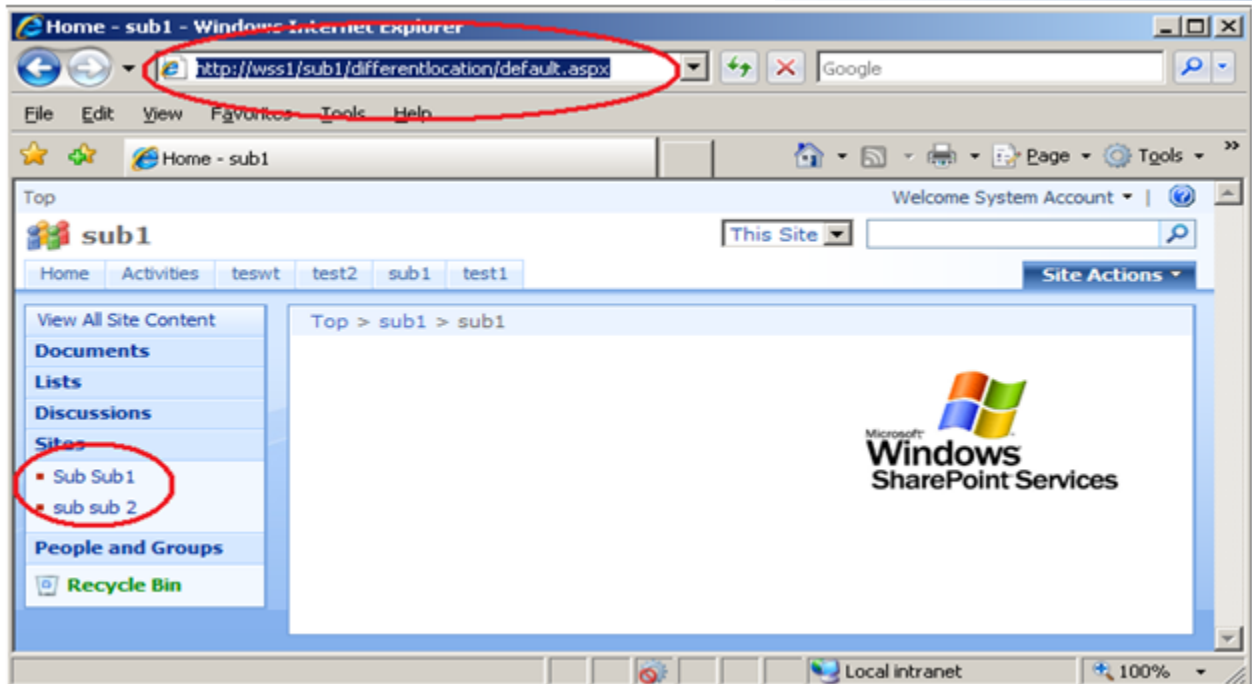


Figure 5: Migrated site and its sub sites under the new URL

SCENARIO 6: DEAD MY SITE CLEANUP

“After many employees have left, do these “dead” My Sites still take up disk space, and if they do, how can we clean them up?”

Dead My Sites occur when an employee leaves the company and their MOSS profile is deleted.

Problems that “dead” My Sites can leave you with:

- They still consume valuable disk space. 1000 dead My Sites at 100MB a piece is 100GB of disk space. Take that times 6 which is the total disk consumption ratio (backup, indexes, etc.) and you’re left with 600GB of wasted disk! To make it worse, if you have four farms (Development, Testing, Staging, and Production) that are all periodically replicated (a common procedure); you’re now dealing with 2.4TB of disk! Cleaning up dead sites maps directly to ROI benefits, as can be imagined.
- Search is still crawling junk content. If the old My Site has documents, lists, or sub sites in it, all that information is still being crawled even though it is very likely that it has become “search results clutter”.

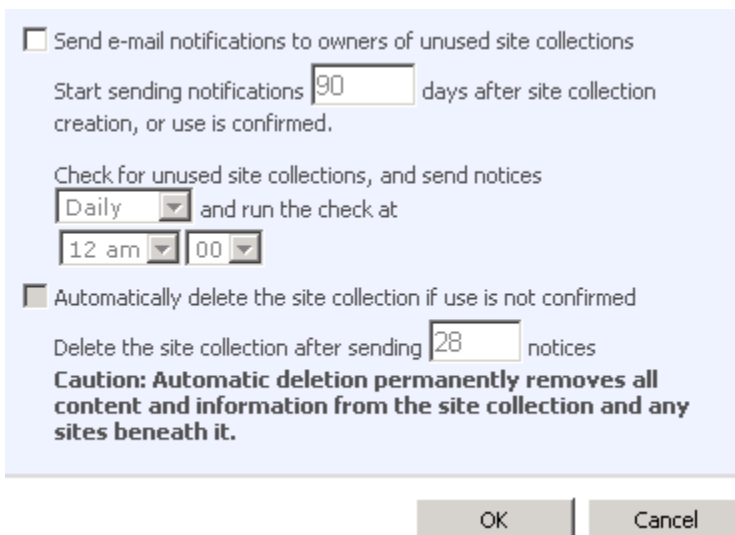
Options for their Removal

1. Manual Deletion

Each My Site could be manually deleted by a SharePoint Administrator. Although this would be arduous for large companies, it is a viable solution for smaller ones. See [section C](#) in the appendix for instructions on how to appropriately delete a My Site.

2. Enable automatic site deletion

If automatic site deletion is turned on (by default it isn’t) in central administration, these sites will be deleted automatically, because the employee will not respond to the emails the system sends out asking if they are still using the site. The problem here is that this feature is enabled across the entire farm, so everybody will get emails every 90 days by default, asking if they are using the site. If they fail to respond after several notices, the site will be deleted. This can be a very dangerous feature and should only be used if you have good backup/restore strategy.



Send e-mail notifications to owners of unused site collections

Start sending notifications days after site collection creation, or use is confirmed.

Check for unused site collections, and send notices and run the check at

Automatically delete the site collection if use is not confirmed

Delete the site collection after sending notices

Caution: Automatic deletion permanently removes all content and information from the site collection and any sites beneath it.

OK Cancel

3. *Build a My Site deletion executable*

A good tool for this situation would be an executable that could be hooked up to Microsoft Identity Integration Server (MIIS). When MIIS deletes a user from AD, thereafter it would run a script that would also go and delete the dead My Site, possibly backing it up first. This would be a better practice than turning on the built in site deletion mechanism because the business logic could be controlled.

APPENDIX

A: Restoring Access to a Disabled My Site

Overview

If an employee has left the company and then decides to return at a later date, you may be in a situation where you want to restore that employee's My Site back to its original condition. If that employee's AD account is still intact, this is a quite easy process, however, if the AD account was deleted, there are additional steps that need to be taken. Even if a new account is created for that user with the same login name, that account has a different unique identifier associated with it. When the user logs in with that new account, they won't have access to the things they did before, including their old My Site because they're coming in under a new unique identifier. To resolve this situation, the STSADM migrate user command needs to be ran and their MOSS profile needs to be restored.


Restoration Implementation Steps


1. *Re-Create user's AD account*
2. *Create a MOSS profile for the new account*

A full crawl of the MOSS profile import is required to pick up new accounts, whereas incremental crawls won't detect them. Wait for the full crawl to run, or kick one off manually by choosing the "Start full import" selection on the user profiles and properties landing page within the SSP. Alternatively to this, you can create the profile manually. To perform the manually creation, navigate to the SSP and click "User Profiles and Properties". Next choose "Add user profile". On the new profile screen, fill out any required fields and enter the account name of the new AD user. Also, make sure to enter the URL of the user's My Site in the "Personal site" field. Until this is entered, that user will not have access to the home page of their My Site.

Add User Profile

Use this page to add a user profile by typing values for the following properties.

 Save and Close | [Cancel and Go Back](#)

* Indicates a required field
 Indicates a field mapped for profile import




 Work e-mail: *	<input type="text"/>
 Work phone: *	<input type="text"/>
 Location Phone:	<input type="text"/>
Home phone:	<input type="text"/>

Figure 7: New user profile form

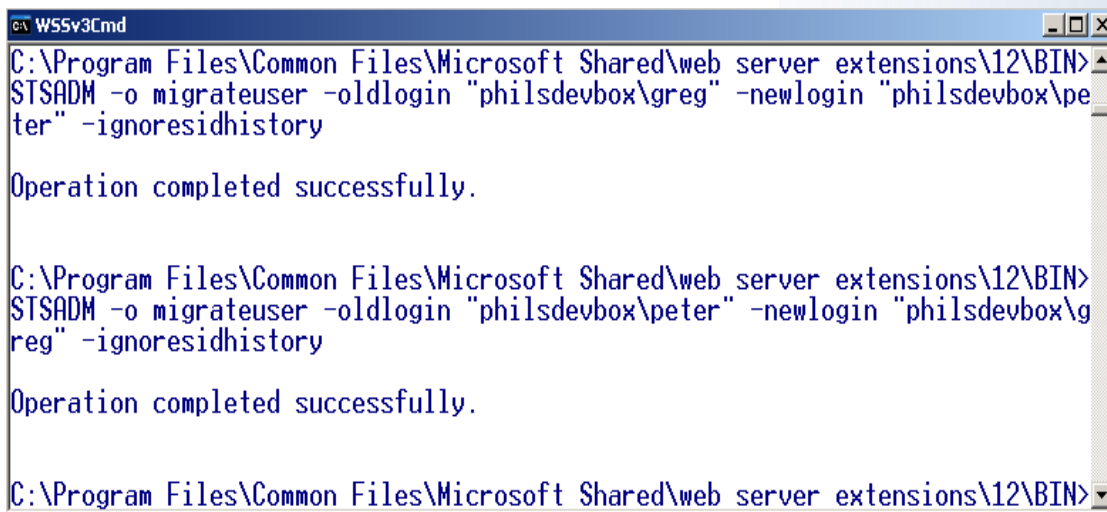
3. Run the migrateuser STSADM command on the new account to restore access

The STSADM migrate user operation replaces all the permissions and metadata from the old account to a new account. On one of the web front ends of the farm, with command prompt navigation to STSADM.exe under c:\program files\common files\microsoft shared\web server extensions\12\bin

Enter the following command:

```
STSADM -o migrateuser -oldlogin [old user account] -newlogin [temporary account] -ignoreSidHistory
```

```
STSADM -o migrateuser -oldlogin [temporary account] -newlogin [new user account] -ignoreSidHistory
```



```

C:\Program Files\Common Files\Microsoft Shared\web server extensions\12\BIN>
STSADM -o migrateuser -oldlogin "philsdevbox\greg" -newlogin "philsdevbox\peter" -ignoreSidHistory

Operation completed successfully.

C:\Program Files\Common Files\Microsoft Shared\web server extensions\12\BIN>
STSADM -o migrateuser -oldlogin "philsdevbox\peter" -newlogin "philsdevbox\reg" -ignoreSidHistory

Operation completed successfully.

C:\Program Files\Common Files\Microsoft Shared\web server extensions\12\BIN>

```

Figure 8: migrateuser demonstration, swapping AD SIDS on a newly created account with the old account that has the same login name

You can't go from one account to another account if they both have the same login name. The above figure demonstrates going through a temporary account, in this case Peter, and thereafter the destination account. After this operation has ran, the employee will be able to access their old MySite with their new AD account.

Available Parameters:

```
stsadm.exe -o migrateuser
  -oldlogin <domain\name>
  -newlogin <domain\name>
  [-ignoreSidHistory
```

If the value is not specified, the SID history meta data of the new user is checked to see if it matches the name of old user. If the value is specified, the checking of meta data is ignored.]

B: Archiving a My Site

Overview

If an employee has left the firm, a good alternative to deleting their My Site would be to archive it in another environment. This could be helpful if there is intellectual property on that My Site, but the purpose for it isn't clear, nor is an appropriate location to migrate it to identifiable. In such circumstances, simply archiving the My Site somewhere off your production environment is a good option. To do this, there needs to be at least two Shared Services Providers (SSP) available, one being the production SSP, and another that serves as the archive. STSADM backup and restore operations will be used to move the My Site across the environments.

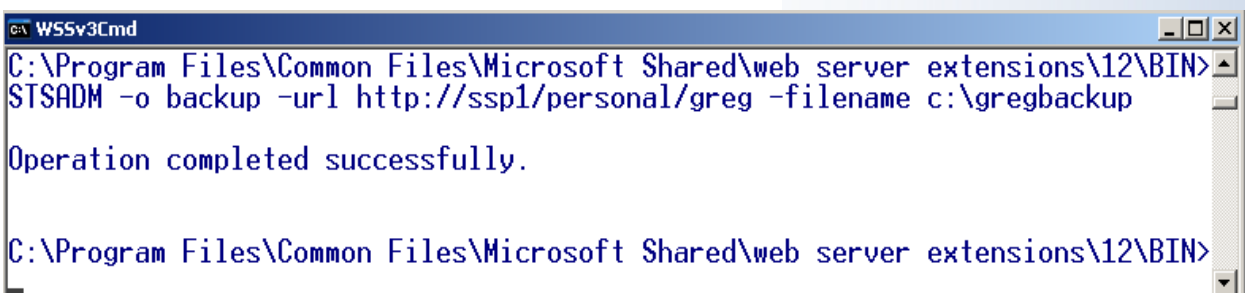
Archiving Implementation Steps

1. Backup the My Site with STSADM backup

The STSADM backup operation will take a backup of the entire site collection. On one of the web front ends of the production farm, with command prompt navigation to STSADM.exe under `c:\program files\common files\microsoft shared\web server extensions\12\bin`

Enter the following command:

```
STSADM -o backup -url [My Site URL] -filename [where to put the backup]
```



```
W55v3Cmd
C:\Program Files\Common Files\Microsoft Shared\web server extensions\12\BIN>
STSADM -o backup -url http://ssp1/personal/greg -filename c:\gregbackup

Operation completed successfully.

C:\Program Files\Common Files\Microsoft Shared\web server extensions\12\BIN>
```

Available Parameters:

```
stsadm.exe -o backup
-url <My Site URL>
-filename <name and location to store the backup file>
[-overwrite <overwrite if there's a file name conflict>]
```

2. Move the backup file from production to the archiving farm

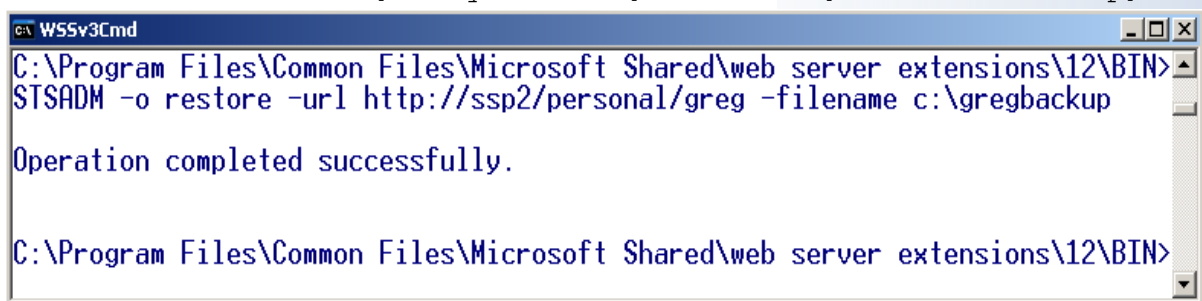
The archiving location may be a separate farm entirely, migrate the backup file if needed.

3. Restore the My Site backup into the Archiving SSP

The STSADM restore operation will take the backup that was created in step 1 and restore it into another URL, which possibly is a different SSP on a separate farm. On one of the web front ends of the archive farm, with command prompt navigation to STSADM.exe under c:\program files\common files\microsoft shared\web server extensions\12\bin

Enter the following command:

```
STSADM -o restore -url [New My Site URL] -filename [location of backup]
```



```

C:\Program Files\Common Files\Microsoft Shared\web server extensions\12\BIN>
STSADM -o restore -url http://ssp2/personal/greg -filename c:\gregbackup

Operation completed successfully.

C:\Program Files\Common Files\Microsoft Shared\web server extensions\12\BIN>
  
```

Available Parameters:

```

stsadm.exe -o restore
-url <new URL to restore to>
-filename <name and location of the backup file to restore>
[-hostheaderwebapplicationurl <web application url>]
[-overwrite <overwrite if the specified URL is already in use>]
  
```

4. Restore MOSS profile in Archive SSP

If the MOSS profile for the user in the archiving SSP doesn't have the "Personal site" field specified, the home page of the My Site will not be accessible and the traffic will be redirected to the View All Site Content page. To rectify this, edit the profile and add the link to the new My Site. If a "User not found" error appears, the profile doesn't exist at all and either a full crawl on the profile import needs to take place, or the profile needs to be manually created. See [section A](#) in the appendix for a demonstration on how to manually create a profile.

C: Deleting a My Site and Its Profile Reference

Overview

If an employee has left the company and their My Site is no longer in use, deleting their My Site is the logical reaction. However, another use case is that you have a My Site, but you want to delete it and start over by creating a new one. Maybe a new feature needs to be prototyped, or the existing My Site was overly cluttered or broken from some unknown cause. In any case, if your desire is to delete and re-create a My Site, you'll need to delete the old one along with the reference in the user's MOSS profile.

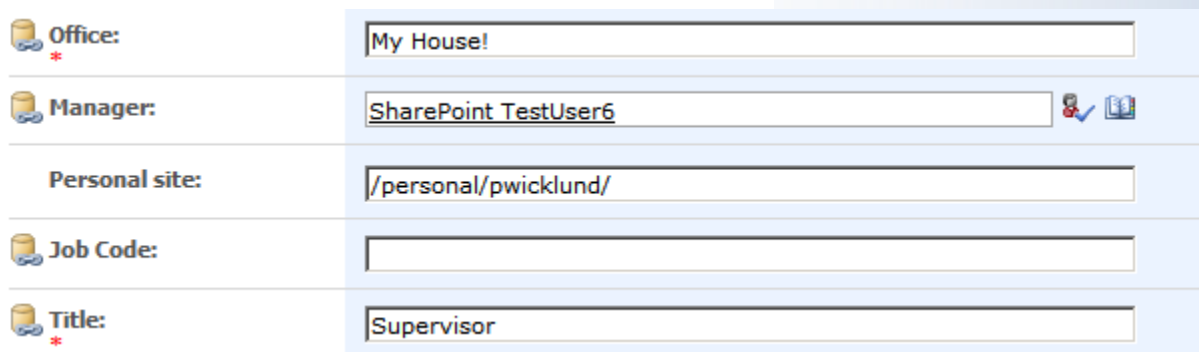
Deletion Implementation Steps

1. Delete the old or dead My Site

Navigate to Site Settings on the My Site. If you can't get there through site actions because the site is disabled, enter “/_layouts/settings.aspx” at the end of the site's root URL.

Click “Delete this site” under the “Site Administration” heading.

2. Delete the reference to the My Site in the user's MOSS profile



The screenshot shows a user profile settings form with the following fields:

Office:	My House!
Manager:	SharePoint TestUser6
Personal site:	/personal/pwicklund/
Job Code:	
Title:	Supervisor

Figure 9: Clear out the "Personal site" field, then click save and close

3. Perform an incremental search crawl (optional)

It could be a good option to perform a search crawl after a My Site has been deleted, especially if that My Site had a lot of sensitive information on it that you want to ensure isn't in the search index.

D: Placing a “Legal Hold” on a My Site

Overview

Many times companies will put a “legal hold” on an employee’s exchange mail box when an investigation needs to take place against that employee. A hold will typically prevent that user from accessing and possibly deleting sensitive emails that the legal or HR departments may find interesting. Depending on the company’s policies, this same procedure may be necessary for an employee’s My Site, because that employee could have sensitive intellectual property on their My Site that the company doesn’t want removed by that employee. To enforce this legal hold on a My Site, simply remove that user’s permissions from that My Site (site collection).

Legal Hold Implementation Steps

1. Remove Site Collection Administrator privileges from the employee’s My Site

Typically, all that needs to happen to remove permissions and put a “legal hold” on a My Site is removing the employee from the Site Collection Administrators group on their My Site (site settings - site collection administrators). Another account will be necessary when you remove the employee’s account, since there has to be at least one account in the group at all times. Remove the employee and then add a service account, some dummy/test account, or possibly the employee’s manager as a replacement account.

Use this page to add and remove site collection administrators.

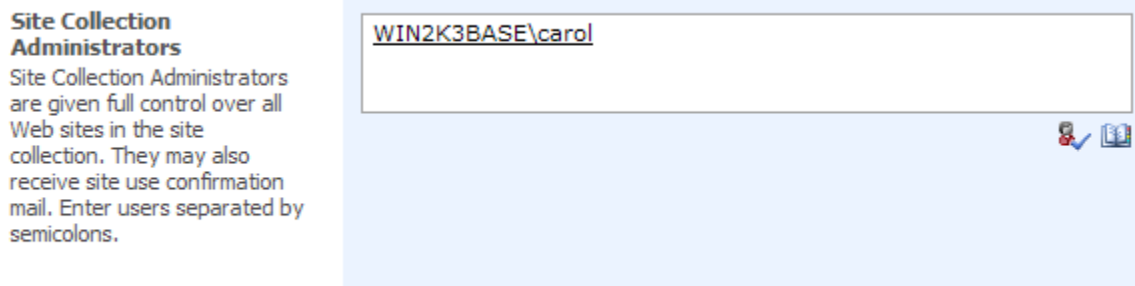


Figure 10: Site Collection Administrators configuration

By default, this will remove access across their entire My Site. However, if the user had setup unique permission anywhere in their My Site, this won’t be enough. To be thorough, every instance of unique permissions (where permissions are not inheriting from their parent securable object) also needs to be removed to completely remove access and enforce a hold on the site. Discovering where these privileges are is tough. Either click through every securable object within the site collection and remove permissions manually, or buy a tool to do it for you. The Discover Unique Permissions feature and Delete Account feature that comes with DeliverPoint (www.deliverpoint.com) works well for this.

E: General Recommendations & Best Practices

My Site auto archiving and deletion tool:

A good tool for any company to help combat dead My Sites would be a tool that would tie into MIIS. When a user is deleted from AD, MIIS could kick off a script that would also archive and delete that user's My Site. This will help maintain good disk utilization as well as search cleanliness.

Dead Account Detection Tool:

In addition to dead sites, dead accounts are also not desirable. Besides seeing metadata throughout the farm from users who are no longer with the company, any alerts those users had setup will continue to SPAM exchange. This can cause undo load on both environments, and over time this can become concerning if not cleaned up on a regular basis. This would also be a good tool that could fit into your MIIS workflows. See www.deliverpoint.com for a good third party option.

Think through your disaster recovery (DR) strategy for better SLA times:

Backing up sites at the farm level is not always the best practice, because what's left is a very high level DR strategy. This makes it necessary to restore the entire farm just to retrieve one site or document if there was ever an emergency. If you have SLAs setup for fast recovery, this is not the best approach especially as your farm grows large. It takes a lot more time to backup and restore 1 terabyte of data versus 1 megabyte. This should be factored in before any SLA agreement is signed. This ties into My Sites because this is the company "playground", where a lot of troubling things can happen and chaos can ensue. Be prepared by establishing a granular DR strategy.

"Legal Hold" ideas:

There are several options that can be utilized for a legal hold. In addition to what was discussed in [section D](#) of the appendix, you could also setup a system that intercepts any delete events that take place on a My Site. When the delete is intercepted, you could cancel the delete and notify the owner that there's a legal hold in place and they can't delete things while that is in place. Or, you could archive the item to some location unknown to the My Site owner, as a secure repository if they're trying to clean out sensitive information. The same options could be said about editing documents in addition to deleting them.

Implement a search strategy to increase content findability and ROI:

Out of box MOSS search is not very effective if it hasn't been customized to your company's unique content. One company's "best bets" are another company's "noise words", and Microsoft doesn't know these details to give you the perfect index that always returns good results. A good search strategy involves a fair amount of business analysis and dedicated maintenance even after it has been implemented, but it definitely translates into ROI. This is because your end users can find information faster and more effectively through a technique that comes more naturally to them (search versus blind navigation).